

R E M A R K S

Request for Reconsideration, Informal Matters, Claims Pending

The application is pending subject to non-final Office action mailed on 14 May 2008. Reconsideration of the claimed invention in view of the amendments above and the discussion below is respectfully requested.

Claims 20-23, 25 and 27-37 are pending.

Arguments re: Khayrallah & Fairman

Rejection Summary

Claims 20-23 and 25 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Publication No. 2003/0200499 (Khayrallah) in view of U.S. Patent No. 6,996,722 (Fairman).

Discussion of Claim 20

Regarding Claim 20, Khayrallah and Fairman fail to suggest a

... method in wireless communications device, the method comprising:

receiving a message identifying a channel on which content will be transmitted;

receiving first layer content information on a first channel;

receiving second layer content information on a second channel,

at least one of the first and second channels identified in the message,

the first and second layer content information is encrypted,
decrypting the first layer content information with a first key,
decrypting the second layer content information with a second
key that is different than the first key.

The Examiner's assertion that the bit streams Khayrallah of are encrypted is erroneous. Error correction coding is not encryption. Error correction coding is used to maintain the integrity of data transmitted over a noisy channel by transmitting redundant information. Encryption is a process of transforming information so that it is undecipherable without a decryption key. The bit streams in Khayrallah are error correction coded, not encrypted.

At paragraph [0019], Khayrallah discusses assigning a traffic channel to a mobile terminal on a call setup channel. At paragraph [0027], Khayrallah discusses a base station (BS) that multicasts, in parallel, separately encoded bit streams on different channels to reduce perceived delay at the mobile terminal. At paragraphs [0028 & 0029], Khayrallah discusses error correction coding (FEC) data segments (K_1 , K_2 , K_3) transmitted on the different channels (1, 2, 3). At paragraph [0022], Khayrallah discusses another embodiment where the broadcast channels carry additional redundancy. At paragraph [0022], Khayrallah indicates that the FEC enables a receiver to reconstruct information with less than all of the originally encoded symbols.

The Examiner concedes that Khayrallah does not disclose the use of separate keys to decrypt the different channels. As noted above, however, Khayrallah does not encrypt at all. While Fairman discloses the use of different key for decrypting different application data units (ADUs), Fairman does not remedy the deficiencies of Khayrallah. One skilled in the art would not be motivated to use separate keys to decrypt the channels of Khayrallah since Khayrallah does not encrypt any channels. The object of Fairman is to

maintain a record of keys generated in the subscriber terminal to track the received ADUs, which are indicative of the quality of service. There is no reason to modify Fairman in a manner that meets the other limitations of Claim 20. Claim 20 is thus patentably distinguished over the art.

Arguments re: Khayrallah, Ranta-Aho & Fairman

Rejection Summary

Claims 27-30, 32 and 34-37 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Publication No. 2003/0200499 (Khayrallah) in view of U.S. Publication No. 2004/0081125 (Ranta-Aho) U.S. Patent No. 6,996,722 (Fairman).

Discussion of Claim 27

Regarding Claim 27, the prior art fails to suggest a

... method in wireless communications network infrastructure entity, the method comprising:
transmitting first layer broadcast/multicast service content information on a first channel;
transmitting second layer broadcast/multicast service content information on a second channel,
the first and second channels are downlink channels, at least one of the first and second channels is a shared broadcast channel,
the first layer broadcast/multicast service content information related to the second layer broadcast/multicast service content information;

encrypting the first and second layer broadcast/multicast service content information using different encryption keys before transmitting.

The Examiner's assertion that the bit streams of Khayrallah are encrypted is erroneous. Error correction coding is not encryption. Error correction coding is used to maintain the integrity of data transmitted over a noisy channel by transmitting redundant information. Encryption is a process of transforming information so that it is undecipherable without a decryption key. The bit streams in Khayrallah are error correction coded, not encrypted.

At paragraph [0019], Khayrallah discusses assigning a traffic channel to a mobile terminal on a call setup channel. At paragraph [0027], Khayrallah discusses a base station (BS) that multicasts, in parallel, separately encoded bit streams on different channels to reduce perceived delay at the mobile terminal. At paragraphs [0028 & 0029], Khayrallah discusses error correction coding (FEC) data segments (K_1 , K_2 , K_3) transmitted on the different channels (1, 2, 3). At paragraph [0022], Khayrallah discusses another embodiment where the broadcast channels carry additional redundancy. At paragraph [0022], Khayrallah indicates that the FEC enables a receiver to reconstruct information with less than all of the originally encoded symbols.

The Examiner concedes that Khayrallah does not disclose a shared broadcast channel and the use of different encryption keys on different channels. As noted above, however, Khayrallah does not use any encryption. Ranta-Aho discloses providing soft handover for multicast content. That Ranta-Aho discloses the use of a shared channel for multicast content does not remedy the other deficiencies of Khayrallah. Moreover, while Fairman discloses the use of different keys for encrypting different application data

units (ADUs), there is no suggestion to encrypt the parallel bit streams transmitted by Khayrallah. The object of Fairman is to maintain a record of keys generated in the subscriber terminal to track the received ADUs, which are indicative of the quality of service. Claim 27 is thus patentably distinguished over the art.

Discussion of Claim 36

Regarding Claim 36, the prior art fails to suggest a

... method in broadcast/multicast subscriber device, the method comprising:
receiving first layer content information on a first channel;
receiving second layer content information on a second channel,
at least one of the first and second channels a shared broadcast channel,
decrypting the first layer content information with a first key and
decrypting the second layer content information with a second key that
is different than the first key.

The Examiner's suggestion that Khayrallah discloses encryption is erroneous. Error correction coding is not encryption. Error correction coding is used to maintain the integrity of data transmitted over a noisy channel by transmitting redundant information. Encryption is a process of transforming information so that it is undecipherable without a decryption key. The bit streams in Khayrallah are error correction coded, not encrypted.

At paragraph [0019], Khayrallah discusses assigning a traffic channel to a mobile terminal on a call setup channel. At paragraph [0027], Khayrallah discusses a base station (BS) that multicasts, in parallel, separately encoded bit streams on different channels to reduce perceived delay at the

mobile terminal. At paragraphs [0028 & 0029], Khayrallah discusses error correction coding (FEC) data segments (K_1 , K_2 , K_3) transmitted on the different channels (1, 2, 3). At paragraph [0022], Khayrallah discusses another embodiment where the broadcast channels carry additional redundancy. At paragraph [0022], Khayrallah indicates that the FEC enables a receiver to reconstruct information with less than all of the originally encoded symbols.

The Examiner concedes that Khayrallah does not disclose a shared broadcast channel and decrypting different channels received at the mobile terminal. That Ranta-Aho discloses the use of a shared channel for multicast content does not remedy the deficiencies of Khayrallah. Moreover, while Fairman discloses the use of different keys for decrypting different application data units (ADUs), there is no suggestion for one skilled in the art to decrypt the parallel bit streams transmitted by Khayrallah since Khayrallah does not encrypt the bit streams before transmission. The object of Fairman is to maintain a record of keys generated in the subscriber terminal to track the received ADUs, which are indicative of the quality of service. Claim 36 is thus patentably distinguished over the art.

Prayer For Relief

In view of any amendments and the discussion above, the Claims of the present application are in condition for allowance. Kindly withdraw any rejections and objections and allow this application to issue as a United States Patent without further delay.

BI ET AL.
"Broadcast/Multicast Services In Wireless
Communications Networks"
Atty. Docket No. CS23442RL

Appl. No. 10/749,021
Confirm. No. 8438
Examiner P. Desir
Art Unit 2681

Respectfully submitted,

/ ROLAND K. BOWLER II /

MOTOROLA, INC.
INTELLECTUAL PROPERTY DEPT. (RKB)
600 NORTH U.S. HIGHWAY 45, W4-37Q
LIBERTYVILLE, ILLINOIS 60048

ROLAND K. BOWLER II 4 AUG. 2008
REG. NO. 33,477

TELEPHONE NO. (847) 523-3978
FACSIMILE NO. (847) 523-2350